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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,453	08/16/2001	Akihiro Ouchi	862.C2332	1321

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EXAMINER	
HOLTON, STEVEN E	

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,453	OUCHI ET AL.	
	Examiner	Art Unit	
	Steven E. Holton	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is made in response to applicant's amendment filed on 12/7/2005. Claims 1,2, and 4-17 are currently pending in the application. An action follows below:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 4-9, 11, 14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (USPN: 4931965), hereinafter Kaneko, in view of Marks (USPN: 5615364).

Regarding claims 1 and 16, which are drawn to a device and associated method of operation, Kaneko discloses, "An electronic board apparatus (Fig. 1) for transmitting data representing a handwritten image written on a predetermined board (Fig. 1, element 8) to an external computer (col. 4, lines 15-18), comprising:

Storage means for storing said data (Fig. 1, in element 1, labeled 'RAM' and col. 16, lines 28-34)." However, Kaneko does not expressly disclose, "first determining means for determining whether or not said external computer can receive said data; and... second determining means for determining whether or not said data is stored in said storage means when said first determining means determines said external

computer can receive said data, wherein if said first determining means determines that said external computer cannot receive said data, said data is stored into said storage means, and wherein if the second determining means determines that said external computer can receive said data, said data stored into said storage means and data representing a handwritten image written on the predetermined board at that time are transmitted to said external computer."

Marks discloses a system for database storage of data on a database and an external backup database computer. Marks discusses that when the primary database uses a first means to detect if the connection to the backup system is available (Fig. 2, block "Send DB operation to Backup over Network"). If the transmission fails the information is placed in a pending queue (Fig. 2, block "Place Operation in Pending Queue). Later a second determining means checks if the backup is capable of receiving data (Fig. 2, block "Connect to Backup over Network") if the connection is available at that time the system then sends any queued operations to the backup (Fig. 2, block "Send Queued Operations to Backup"). If the transmission of operation data is successful and the network connection is found to be active and no errors from the backup are detected information is sent to the backup rather than being saved in the queue for later transmission. Marks discusses this situation further in col. 3, lines 51-60. The queue used to save transactions could be a buffer memory or a data structure programmed on a hard-drive memory. The use of a buffer or a hard-drive would be one of design choice for one skilled in the art based on the amount of memory required to

save a single action or the amount of queue space that is considered reasonable for an interruption of the connection between the primary and backup data systems.

Kaneko and Marks are related in the transmission of electronic data between a system and external computer system. At the time of invention it would have been obvious to one skilled in the art to provide a method of handling situations when the connection between electronic board and external computer of Kaneko became disrupted or broken. The motivation for doing so would be to protect against a failure within the communications system. Thus, it would have been obvious to one skilled in the art to produce an electronic writing input device communicating with an external computer system to store data locally if the connection to an external computer failed or was broken to produce at device and related method of operation as specified in claims 1 and 16.

Regarding claim 2, Marks discloses a system where if a first determining means determines that the external computer can receive data the data is transmitted to the external computer. This is shown in Fig. 2, between elements named "send DB operation to backup over network" and "place operation in pending queue". If the connection fails, then the information is stored to the queue to be transmitted later. If the connection is successful then the information is transmitted immediately and not saved.

Regarding claim 4, Kaneko does not expressly disclose what would be part of the coordinate information used by the input device, but the device uses a pen for input purposes and does not specify exact locations on the input device where the user could

not properly input. Therefore, it would be very possible for a user of the system to input images that would include characters, letters, figures, tables or any other data that can be made using a pencil and paper. These types of images cover the limitations of claim 4.

Regarding claim 5, Kaneko discloses an input apparatus that is regarded as "a coordinates input apparatus (abstract, line 1). The device represents all input data as coordinate information. Such information would represent any handwritten images that are input on the device, and teach the limitations of claim 5.

Regarding claims 6 and 17, these claims are a device and related method of operation. Kaneko discloses, "further comprising display means (fig. 1, element 11) for displaying said handwritten image based on said data." The examiner notes that a device using the limitations of claim 6 could then be operated using the method disclosed by claim 17.

Regarding claim 7, Kaneko does not expressly disclose that the display means could display an image based on the data stored in the storage means, however, the display can receive coordinate information directly from the processor of the device, it would be just as able to send coordinate information from a stored location in the memory of the device. This would produce a device as specified in claim 7.

Regarding claim 8, Kaneko discloses, "...wherein a display device to display said handwritten image based on said data is connectable to said apparatus (col. 4, lines 5-8)." Kaneko discusses that the device can send the coordinate information to an external computer or other device. A computer can be used as a display device and the

connection could also be made to send data directly to a monitor or other visual display device.

Regarding claim 9, the Examiner takes Official Notice that it is well-known in the art to use a timing means to transmit electronic data over a network. The timing means is used to synchronize the data as it is transferred so that information is sent in distinguishable packets that can be read by the receiving system without confusion.

Regarding claim 11, the Examiner takes Official Notice that is old and well-known in the art to allow for removable memory cards such as computer disks and other similar devices for storage of information for a portable device. Therefore, it would have been obvious at the time of invention for one skilled in the art to allow the memory device used to store coordinate information to be removable from the input device. This would allow the user to expand the amount of memory available and allow for transport from the device to a base station for later reproduction or retrieval.

Regarding claim 14, the Examiner notes that the limitations of this independent claim are a combination of the limitations and preamble of claim 1. Because of the similarities of the limitations of the two claims, the arguments used to reject claim 1 are used to reject claim 14.

3. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Marks as applied to claims 1 and 14 above, and further in view of Bricklin et al. (USPN: 5539427), hereinafter Bricklin.

Regarding claim 10, as shown above, the combination of Kaneko and Marks disclose all of the limitations of claim 1 that are part of claim 10; however, they do not expressly disclose, "wherein said data, to which page break or index information is added, is stored." Bricklin discloses a graphic indexing system used to store graphic information for recall at a later time. The system allows the user to select a portion of the input graphic data to be index information, and then stores associated text with the index information.

Bricklin is analogous art because he deals with text and handwritten input on an electronic pad device. At the tine of the invention it would have been obvious to one skilled in the art to use an indexing system similar to the system defined by Bricklin to store multiple entries on a board input apparatus constructed from the combination of Kaneko and Marks. The motivation for doing so would have been to allow for more than one page of information to be input using the handwriting device, and that the information could be retrieved for re-display. Therefore, it would have been obvious to use a graphic indexing system combined with and handwriting input device to produce an input apparatus as specified in claim 10.

Regarding claim 15, as shown above, the combination of Kaneko and Marks disclose all of the limitations of claim 14 that are part of claim 15. Kaneko also

discloses, "display means for displaying said handwritten image based on said data (Fig. 1, element 11)." However, neither Kaneko nor Marks expressly disclose, "selection means for selecting one of a first mode and a second mode,

Wherein said first mode, said display means displays said handwritten image based on said data from said data generation means,

And wherein said second mode, said display means displays said handwritten image based on said data stored in said storage means."

Bricklin discloses a system for indexing and retrieval of graphically input data. There is no specifically mention a selection means for picking one mode or another, such a means must exist within the system because a user is able to both enter new data and retrieve old data. When entering new data, the coordinates of the inputted information will be shown as quickly as inputted because the user can "select a portion of the text for indexing without disrupting the natural handwriting action (abstract, lines 10-12)." If the images were not displayed from the recently input data, the flow of handwriting would be interrupted. Thus this input style is the same as the claimed 'first mode' of operation. When the user reviews the indexed information in the system, stored information can be shown and this corresponds to the claimed 'second mode' of operation. Thus, the combination of an indexing and review method as disclosed by Bricklin with handwriting input device as disclosed by the combination of Kaneko and Marks would produce a device as specified in claim 15

4. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Marks as applied to claim 1 above, and further in view of Davis et al. (USPN: 6232962), hereinafter Davis.

Regarding claims 12 and 13, as shown above, the combination of Kaneko and Marks disclose all of the limitations of claim 1 that are part of claims 12 and 13. Davis discloses a detector assembly (Fig. 7D, element 72) that can be "attached along the top, bottom, or side of the writing surface (col. 42, lines 3-4)." This device therefore can be 'provided at one end of the board' as part of claim 12 and could be 'removable from said board' as part of claim 13.

Davis is analogous art because he deals with a board input apparatus for use as handwriting input system. At the time of invention it would have been obvious to one skilled in the art to enclose a sensor device as disclosed in the combination of Kaneko and Marks in a movable and detachable housing as taught by Davis. The motivation for doing so would have been to provide a device that was portable and able to be positioned as needed for a specific input or display function, such as moving from one room to another during the middle of a presentation. The device could be taken down and moved to another area and the presentation restarted without any data lost or extra setup of a new system required. Thus, it would have been obvious to embody a handwriting board input apparatus in a portable housing to produce a device as disclosed in claims 12 and 13.

Response to Arguments

5. Applicant's arguments filed 12/7/2005 have been fully considered but they are not persuasive. The Examiner disagrees with the arguments that Marks does not teach a system wherein if an external computer cannot receive data the data is stored until a connection is available for later transmission. As shown in the arguments above Marks uses a queue to store transaction information when the primary determines that it cannot transmit to the back-up system in col. 3, line 50 – col. 4, line 7. The queue could be implemented using a buffer system or a data structure in a hard-drive or RAM of the computer system. Either technique would involve saving the transaction information so that when the connection between the primary and back-up databases is reestablished the queued transaction information is sent. This is used to make sure that no data is lost when transmitting to the back-up system. This transmission method to assure that data is not lost when transmitting to an external system could be used with the drawing board of Kaneko which can transmit information to an external host computer (col. 4, lines 12-20). Although Marks saves the transaction information in the primary database and transmits the information to the back-up database at the same time, the storage within the primary database is not necessary. It would be obvious to one skilled in the art that the queuing of information when the external system is unable to receive information and testing of the communications link would work in exactly the same manner, when only the external source is used to permanently store the data as the queue could be entirely separate from the primary database memory.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven E. Holton
February 19, 2006
Division 2629 (Formerly 2673)

AMR A. AWAD
PRIMARY EXAMINER